

FUELING A DIGITAL METHANE FUTURE

The role of digital technologies in minimizing global oil and gas methane emissions

Growth and opportunity

Digitalization of the oilfield, such as automated asset management, predictive maintenance and industrial internet of things (IIoT), has the potential to unlock up to \$1.6 trillion in value. A new report from Accenture Strategy and Environmental Defense Fund outlines how to leverage digital transformation to optimize, accelerate and scale global methane mitigation. Companies can first identify where they are on the digital methane continuum (Figure 1) and then identify the best projects to explore integrating methane into their digitalization work (Figure 2).

Integrating methane into digital technology upgrades improves efficiency, saves product

Reducing emissions could save upstream oil and gas companies US\$34 billion globally. Science shows that 80 percent of methane emissions are caused by 20 percent of

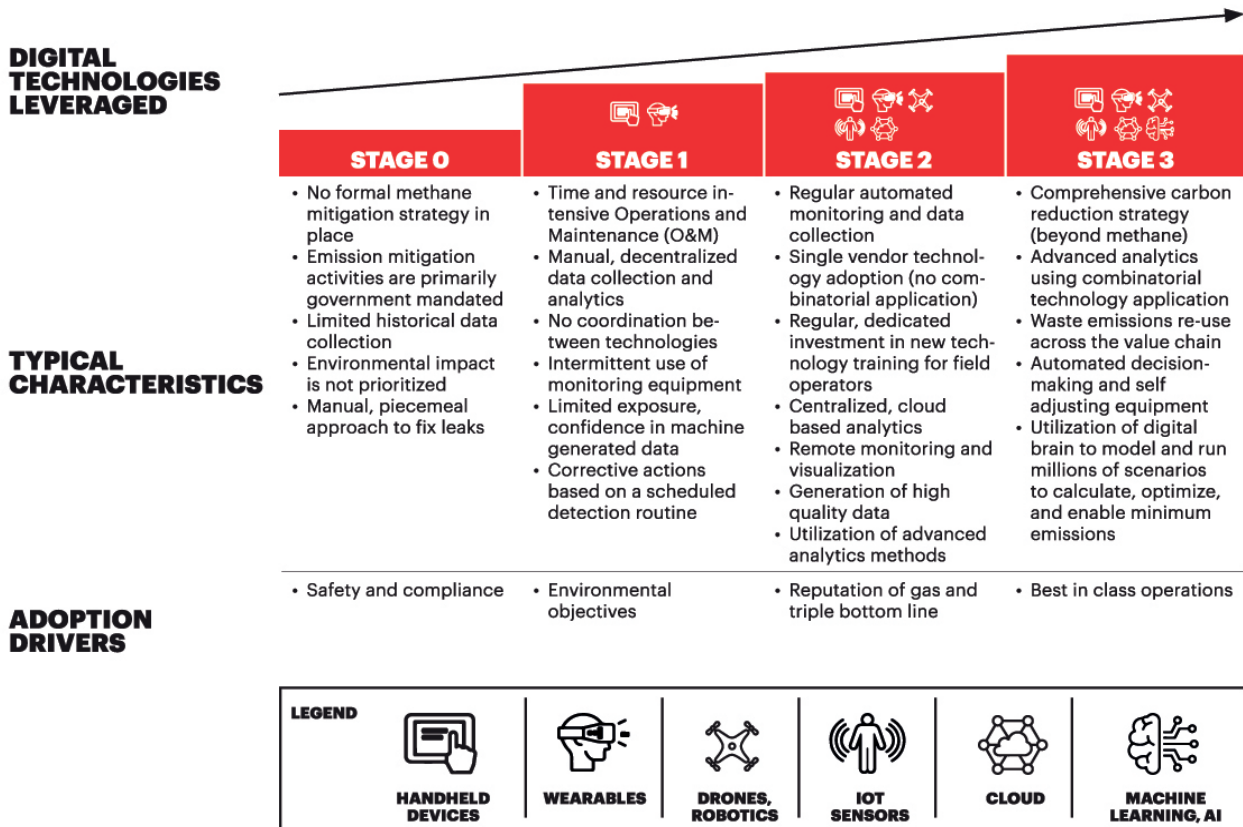
the leaks. Digitally-enabled leak management has the potential to immediately identify that 20 percent.

Today, field staff are deployed to search for leaks with handheld instruments. Not only could digitally-based methane management significantly reduce overall detection costs, it could potentially leapfrog early phase, manual steps. By integrating methane emissions management from the start, companies can determine where the biggest problems are, in real time.

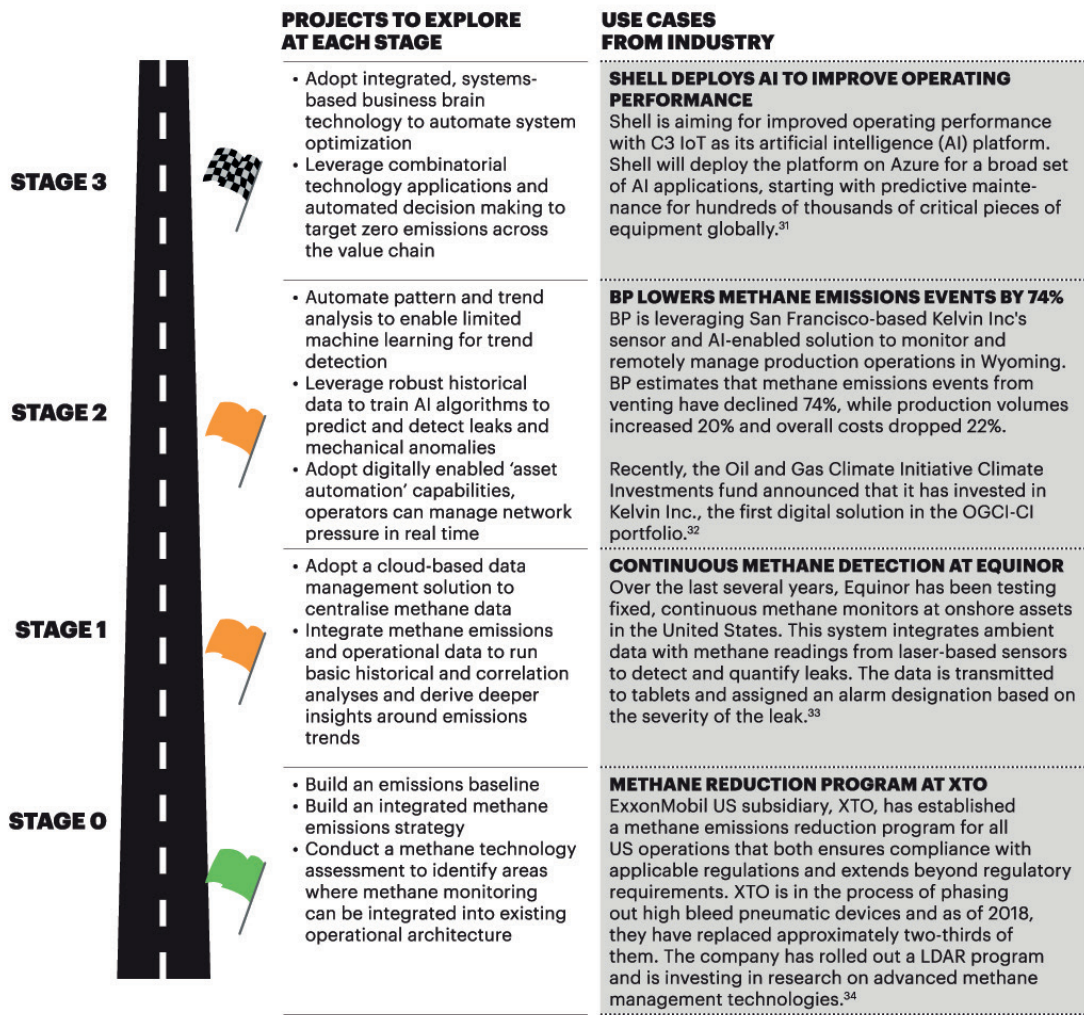
To stay competitive tomorrow, methane technologies need to go digital

For industry leaders that have committed to time-bound methane reduction targets, such as the thirteen members of the Oil and Gas Climate Initiative, digital solutions are a critical tool for realizing methane commitments and verifying emission reductions.

FIGURE 1
THE DIGITAL METHANE MATURITY CONTINUUM



**FIGURE 2
A ROADMAP FOR THE INDUSTRY**



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